

the name of " *Quadrula symmetrica* ") beyond those adduced by me, except one which I undertake to say is erroneous, namely that "the plates are either chitinoid or membranous." On the other hand, he undoubtedly furnishes the completest proof of the propriety of referring the form to the genus *Diffugia* when the only remark he has to make upon the animal is that the sarcode "has the same character as that of *Diffugia*." This ought to be borne clearly in mind, for Prof. Leidy subsequently speaks of *Quadrula symmetrica* as "the only representative of its genus."

But it is quite needless to argue the question of priority a step further, for I now have to place on record an important fact of which I was ignorant at the time I described *Diffugia symmetrica* in 1863-64, and discovered only within the present year, viz. that this identical form had been figured in Ehrenberg's 'Infusionsthierchen' as a *Diffugia*. Ehrenberg's subsequent remarks in the 'Proceedings of the Berlin Academy' and elsewhere, to which allusion is now made by Prof. Leidy, are altogether beside the question at issue, except to the extent of proving that Ehrenberg recognized the validity of my specific appellation of "*symmetrica*" and retained it. Of course, the moment I found I had overlooked Ehrenberg's title to priority (unfortunately too late to be made known to the illustrious dead), I determined on the first suitable occasion to cede all title to the discovery of *D. symmetrica*, though I was undoubtedly the first to detect it in this country, and to discover, describe, and figure the other new forms of testaceous Diffugidæ of which I shall have occasion to speak in the concluding part of this paper.

[To be continued.]

XXXI.—On a Collection of *Lepidoptera* made at Manipur and on the Borders of Assam by Dr. George Watt. By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

[Plate VIII.]

[Concluded from page 310.]

#### Lycænida.

##### 69. *Cyaniris placida*.

*Cyaniris placida*, Moore, P. Z. S. 1883, p. 523, pl. xlvi. fig. 5.

Near Assam.

Only males of *C. placida* were obtained.

70. *Cyaniris puspa*.

*Polyommatus puspa*, Horsfield, Cat. Lep. E. I. Co. p. 67. n. 3 (1828).

♂. Near Assam.

Two of the three examples obtained seem a little aberrant, and may belong to a distinct but allied species; they are, however, in poor condition, and it is possible that the species may vary somewhat both in the width of the outer border on the primaries and in the size and prominence of the markings on the under surface. I have, however, failed to notice similar variation (excepting where due to seasonal polymorphism, as in the North-American species) in the allied species. I do not find any characters to warrant the separation of the other male from Horsfield's Javan type.

71. *Nacaduba ardates*.

*Lycæna ardates*, Moore, P. Z. S. 1874, p. 574, pl. lxxvii. fig. 1.

Near Assam.

Four damaged males were obtained, no two of them absolutely alike in the pattern on the under surface of the primaries. A nearly allied "species" described by De Niceville (Journ. Asiat. Soc. Beng. vol. lii. p. 72, pl. i. fig. 13, 1873) is separated from the above by its superior size, by the abbreviation of the band crossing the cell on the under surface, and by the absence of the lowest spot in the discal series. The specimens before me vary from 22 to 24 millim. in expanse of wing; the band is only abbreviated in one of the larger specimens, and, though all have the full number of sections to the discal band, the last two sections (they can hardly be called spots) are sometimes in line and sometimes decidedly out of line; the failure of the last spot of a discal series or the last section of a discal band is of frequent occurrence in the Lycænidae; therefore, since both *N. ardates* and *N. bhutea* appear to be common in Sikkim, I feel some doubt as to the validity of the latter as a distinct species; at the same time, with only the figure of this form before me I cannot positively assert that it is not distinct\*.

72. *Lampides elpis*.

*Polyommatus elpis*, Godart, Enc. Méth. ii. p. 654. n. 125 (1823).

♂. Near Assam.

We have this species also from Silhet; the Indian examples

\* I have, since the above was written, seen one imperfect specimen of *N. bhutea* in Mr. Moore's collection; I should certainly hesitate to describe so nearly allied a form myself.

are slightly more azure in tint than those from Java, but do not otherwise differ.

73. *Catochrysops lithargyria*.

*Catochrysops lithargyria*, Moore, Ann. & Mag. Nat. Hist. ser. 4, vol. xx. p. 340 (1877).

♂. Near Assam.

74. *Catochrysops strabo*.

*Hesperia strabo*, Fabricius, Ent. Syst. iii. 1, p. 287. n. 101 (1793).

♂. Near Assam.

75. *Myrina etolus*.

*Papilio etolus*, Fabricius, Mant. Ins. ii. p. 66. n. 620 (1787).

♂. Manipur.

**Papilionidæ.**

*PIERINÆ.*

76. *Colias Fieldii*.

*Colias Fieldii*, Ménétrés, Cat. Mus. Petrop. Lep. i. p. 79, pl. i. fig. 5. (1855).

♂ ♀. Near Assam.

Dr. Watt obtained fifteen examples, the largest of which measures 64 millim. in expanse of wing, and thus compares favourably with *C. aurorina* of Europe. The smallest example in the Museum-series is one from the N.W. Provinces of India; it not only differs in its greatly reduced size and somewhat more produced primaries, but in its narrower borders, blackened veins, and pupilled discocellular spot; possibly it may be distinct; its expanse of wing is only 36 millim. I leave the question of the distinctness of these two forms until further material turns up; perhaps Mr. Elwes will be able to decide the matter.

Before passing on to the next genus (*Terias*) I feel called upon to say somewhat touching Mr. Distant's recent treatment of the genus (Lep. Malayana, pp. 302-307), which is based wholly upon the supposition that Mr. Pryer's experiments with Japanese species were as careful as he himself thought them. From long experience in plant-growing I know well that nothing is easier than to overlook such conspicuous objects as scale-insects, even though one fancies one has examined carefully every leaf of a plant; how much more so the small eggs of *Terias*! Mr. Pryer says

that he potted a number of plants, and after looking over them, or, in his own words, "carefully examining every leaf for eggs or larvæ," he placed upon them females of *Terias mandarina*, and the result was that he bred *T. mandarina* (at which he was greatly astonished, and immediately decided that this was a seasonal form of another species); he also bred *T. Mariesii* and some of the intergrades, which seem not to have astonished him at all.

Mr. Pryer's experiments may be satisfactory, or they may not; if the plants possessed a great number of leaves, the probability is that some eggs were overlooked; if they were roughly potted, it is not improbable that such eggs as were upon them fell upon the mould and were hatched there; but anyhow *T. mandarina* cannot be called a seasonal form of *T. Mariesii* or *T. hecabe*, if it produces itself.

Secondly, Mr. Distant expects that breeding will prove *T. sari* to be "only a variety of *T. hecabe*;" if so, why not expect the whole of the Old-World species to prove varieties of *T. hecabe*, since forms closer to *T. hecabe* than *T. sari* are found in all parts of Asia, Africa, and Australia? Is it reasonable to suggest that *T. sari*, a purely Malayan species, may be a variety of a species which ranges from Darjiling to the Philippines, or, at any rate, is at present assumed to do so (for it is doubtful whether all the specimens now referred to *T. hecabe* are rightly placed with that species). Mr. Distant remarks that breeding experiments have not yet proved that *T. sari* is a variety of *T. hecabe*; yet *Horsfield*, *Thwaites*, and *Mackwood* have all bred it, by his own showing. However I am willing to accept his admission—a rash one for an entomologist to make—"I treat this species as a variety" (see p. 321). I know of many lepidopterists who do this; but Mr. Distant is the first who has boldly come forward and confessed it.

#### 77. *Terias venata*?

*Terias venata*, Moore, Cat. Lep. E. I. Comp. i. p. 65. n. 117, pl. ii. a. fig. 2 (1857).

Near Assam.

A pair of a *Terias* agreeing best with this species, but apparently distinct; I, however, consider that, as the differences are slight, two somewhat imperfect specimens are insufficient material upon which to separate this form from *T. venata*.

#### 78. *Terias hecabeoides*.

*Terias hecabeoides*, Ménétrés, Cat. Mus. Petrop. Lep. i. p. 85, pl. ii. fig. 2 (1855).

♂. Near Assam.

This may eventually prove to be distinct from typical *T. hecabeoides*, the specimens being decidedly larger and more primrose-coloured than in the figure above quoted, which is nearer typical *T. hecabe*.

79. *Terias heliophila*, sp. n. (Pl. VIII. fig. 2.)

♂. Bright primrose-yellow: primaries above with a broad dark brown external border nearly as in *T. sari*, but with the sinus distinctly bisinuated; external border of secondaries moderately broad, a little less so than in typical *T. Mariesii*, with distinctly sinuated inner edge: under surface bright gamboge-yellow, with markings of *T. æsiope*, only less strongly defined; the apical streak of the primaries represented by two or three diffused red-brown spots. Expanse of wings 47 millim.

Near Assam.

Three male examples were obtained, but only one of them is in tolerable condition; the species, however, cannot be referred to anything hitherto described, its nearest ally being *T. maroensis* from Timor-Laut.

80. *Terias simulata*.

*Terias simulata*, Moore, Lep. Ins. Ceylon, i. p. 119, pl. xlv. figs. 2, 2 a, 2 b (1881).

Near Assam.

Five examples, in somewhat worn condition.

81. *Terias æsiope*.

*Terias æsiope*, Ménétré, Cat. Mus. Petrop. Lep. i. p. 85, pl. ii. fig. 3 (1855).

♂ ♀. Near Assam.

Nine worn specimens were obtained.

82. *Terias irregularis*.

*Terias irregularis*, Moore, P. Z. S. 1882, p. 253, pl. xii. fig. 3.

♂. Near Assam.

83. *Dercas Verhuelii*.

*Colias Verhuelii*, Van der Hoeven, Tijd. Nat. Gesch. v. pl. viii. figs. 3, 4 (1838).

♂ ♀. Manipur.

Only one pair was obtained.

84. *Ixias evippe*.

*Papilio evippe*, Drury, Ill. Exot. Ent. i. pl. v. fig. 2 (1773).

Ten males. Manipur.



85. *Hebomoia glaucippe*.

*Papilio glaucippe*, Linnæus, Mus. Lud. Ulr. p. 240 (1764).

♂. Manipur.

86. *Prioneris thestylis*.

*Pieris thestylis*, Gray, Zool. Miscell. p. 76 (1842).

Manipur.

Seven males were caught, two of them not quite typical, the yellow angular belt on under surface being wider than usual. We have a similar example from Darjiling in the Museum series.

87. *Delias ithiela*.

*Thyca ithiela*, Butler, Ann. & Mag. Nat. Hist. ser. 4, vol. iv. p. 242 (1869).

♂. Near Assam.

Originally described from Penang, and on that account included by Mr. Distant in his admirable work 'Rhopalocera Malayana;' this locality, however, was an error arising out of the fact that the type was labelled thus—'P.,' which, with Wallace's specimens, stands for "Penang;" but with specimens received from the East India Company (as Mr. Moore pointed out some two or three years since on a ticket which he attached to this very species) it stands for "Darjeeling, Pearson." Had Mr. Distant examined my type, which, by his own admission, he did not do, he would have avoided the repetition of this error.

88. *Delias agostina*.

*Pieris agostina*, Hewitson, Ex. Butt. i. *Pieris*, pl. i. figs. 1, 2 (1852).

♂. Near Assam.

89. *Appias galba*.

*Tachyris galba*, Wallace, Trans. Ent. Soc. ser. 3, vol. iv. p. 378. n. 41 (1867).

Manipur.

Seven examples were obtained.

90. *Appias Eleonora*.

*Pieris Eleonora*, Boisduval, Sp. Gén. Lep. i. p. 481. n. 64 (1836).

♂ ♀. Manipur.

Out of twenty-four examples only one is a female.

91. *Appias vacans*.

*Appias vacans*, Butler, Trans. Ent. Soc. 1879, p. 490.

♂. Manipur.

Five males, agreeing exactly with typical *A. vacans* in the more sulphur-tinted colour of the under surface, by which character alone can I distinguish the males of this species from those of *A. Eleonora*, whereas the females differ widely enough. Mr. Moore's figure in 'Lep. Ceylon' better represents *A. Eleonora*, being decidedly too ochraceous for my male of *A. vacans*.

92. *Hiposcritia durvasa*.

*Pieris durvasa*, Moore, Cat. Lep. E. I. Comp. i. p. 73. n. 142 (1857); P. Z. S. 1857, pl. xlv. fig. 6.

Four males. Near Assam.

93. *Hiposcritia lalage*.

*Pieris lalage*, Gray, Zool. Miscell. p. 76 (1842); Doubleday & Hewitson, Gen. Diurn. Lepid. pl. vi. fig. 5 (1847).

Ten males. Manipur.

94. *Hiposcritia pseudolalage*.

♂. *Catophaga pseudolalage*, Moore, P. Z. S. 1879, p. 142.

Manipur.

Three males represent this species, but in so shattered a condition that they are chiefly valuable as indicating the existence of the species at Manipur.

95. *Hiposcritia argyridina*, sp. n.

♂. Above similar to *H. pseudolalage*, but usually smaller and with the spot on second median interspace better separated from the external border; basal area more silvery than in any of the allied species: below it differs in the apical area of primaries, and whole of secondaries being irrorated with brown, as in *H. mahana*, instead of pale buff. Expanse of wings 56-62 millim.

"January 8, 1881. Valley of the Khöonah Khong, Eastern Ranges, Manipur.

"I was surprised on reaching the river to find a white butterfly in great abundance flying down the stream in strings of fifty to a hundred like ducks. I had a swing with my net and caught ten to fifteen at each turn. I don't remember to have seen this habit, nor indeed the insect before. Not a single specimen was seen flying up the river, nor one fluttering about; all seemed intent upon some definite journey down stream, each following his neighbour: if disturbed they changed their course for a time, but soon resumed it. I was still further surprised to find the same insect

in the woods adjoining, *singly*, loitering, but flying, upon the whole, up the valley."—*Dr. Watt*.

The female is in Mr. Moore's collection as that sex of *H. pseudolalage*; the latter, however, is much more like *H. lalage* on both surfaces; it is, however, smaller, has the anal half of the external border of secondaries partly divided by a submarginal macular grey streak, and on the under surface the basal area of these wings and the disco-submarginal dark grey line are far better defined. We have it from Darjiling, whence also all our male examples were received.

Dr. Watt sent home seventeen specimens of *H. argyridina*, but unfortunately the bulk of them were more or less damaged, probably having knocked one another about in the net. It is a significant fact that no other species was mixed up with them; had there been, it would have cast a doubt on the validity of the species in this group.

#### 96. *Hiposcritia shiva*.

*Hiposcritia shiva*, Swinhoe, P. Z. S. 1885, p. 138. n. 106, pl. ix. figs. 1, 2.

Manipur.

Twenty-six examples were collected. Colonel Swinhoe says that it is "very much like a diminutive *H. narendra* above;" but the greater part of the specimens before me are quite as large and some even larger than that species; it varies in expanse of wing from 47 to 68 millim.; it varies also in pattern not a little, in the number and size of the white subapical spots on the primaries, in the prominence or entire absence of the black process of the external border on the second median interspace, in the absence or prominence of the colouring and marking of the under surface, most examples being almost as yellow as *H. durvasa* and with similar markings to those of *H. narendra*; nevertheless it perfectly holds its own as a distinct species.

#### 97. *Hiposcritia mahana*.

♂. *Appias mahana*, Moore, *Ann. & Mag. Nat. Hist.* ser. 4, vol. xx. p. 48 (1877).

Wallace (*Trans. Ent. Soc.* 3rd ser. vol. iv. p. 382) speaks of this species, under a MS. name of Boisduval's, as apparently undescribed, and says that the name "should be altogether dropped;" he appears, however, not to have described the species. The latter is similar on the upper surface to *H. shiva*, but its female more nearly resembles that sex of *H. indra*, differing from it chiefly in its smaller size, less produced primaries, the complete submarginal series of white



spots on upper surface of secondaries, and the more dusky colouring of these wings on the under surface; the male differs on the under surface from *H. shiva* in the brownish irrorated character of the apical area of the primaries and whole of secondaries on the under surface, in which respect it corresponds with *H. pandione*. Expanse of wings, ♂ 59–65 millim., ♀ 68 millim.

One male. Manipur.

*H. mahana* is in the Museum collection from Silhet and Calcutta.

98. *Huphina nama*.

*Pieris nama*, Moore, Cat. Lep. E. I. Comp. i. p. 76. n. 148 (1857);  
P. Z. S. 1857, pl. xlv. figs. 1, 2.

Twelve males. Manipur.

99. *Huphina phryne*.

*Papilio phryne*, Fabricius, Syst. Ent. p. 473. n. 131 (1775).

♂. Near Assam.

100. *Ganoris gliciria*.

*Papilio gliciria*, Cramer, Pap. Exot. ii. pl. clxxi. E, F (1779).

♂ ♀. Irang River, Dec. 1881.

Dr. Watt collected twenty-five examples of this species.

101. *Ganoris ajaca*.

*Pieris ajaca*, Moore, P. Z. S. 1865, p. 490. n. 21, pl. xxxi. fig. 16.

♂ ♀. Near Assam.

One pair only was obtained, both examples being a little larger than Moore's type, but not otherwise differing.

PAPILIONINÆ.

102. *Papilio antiphates*.

*Papilio antiphates*, Cramer, Pap. Exot. i. pl. lxxii. A, B (1779).

Two examples. Manipur.

103. *Papilio doson*.

*Papilio doson*, Felder, Verh. zool.-botan. Gesellsch. xiv. p. 305. n. 222 (1864).

One example. Manipur.

104. *Papilio acheron*.

*Zetides acheron*, Moore, Ann. & Mag. Nat. Hist. vol. xvi. p. 120 (Aug. 1885).

Eight examples. Manipur.

105. *Papilio bathycles*.

*Papilio bathycles*, Zinken, Nova Acta Acad. Nat. Cur. xv. p. 157, pl. xiv. figs. 6, 7 (1831).

Seven specimens. Near Assam.

106. *Papilio sarpedon*.

*Papilio sarpedon*, Linnæus, Mus. Lud. Ulr. p. 196 (1764).

Six more or less worn examples. Manipur.

107. *Papilio agamemnon*.

*Papilio agamemnon*, Linnæus, Mus. Lud. Ulr. p. 202 (1764)

Manipur.

Three examples were obtained.

108. *Papilio xenocles*.

*Papilio xenocles*, Gray, Zool. Miscell. p. 74 (1842).

Manipur.

Four examples were taken.

109. *Papilio danisepa*, sp. n.

Allied to *P. caunus*, and mimicking *D. rhadamanthus*; it differs from the Bornean *P. caunus* in its superior size, the much longer costal margin of the primaries, the much larger white patch at the end of the cell, the better defined submarginal spots on the primaries, less numerous and smaller submarginal spots on the secondaries, and in having the basal half of the secondaries white crossed by black veins. Expanse of wings 120 millim.

One male. Near Assam.

In the Museum collection we have a male scarcely differing from the above, and evidently of the same species, from Silhet. In the Hewitson collection is a male from Borneo corresponding with our Bornean specimen; there are also two males from Sumatra differing from the latter much as *Danisepa diocletianus* does from *D. Lowii*; they agree with *P. caunus* in form of wing and are of about the same size, but differ in having nearly twice as much white at the base of the secondaries\*. As there can be no reasonable doubt of their being constant to locality, I propose to name the Sumatran race *P. velutinus*. I have no doubt that the *P. caunus* of M. Oberthür's list, from Java, is a fourth form in which the basal white patch has almost disappeared, whilst that from Nias should have no patch at all.

\* *P. agialis*, Distant (Annals, vol. xii. p. 352), from Singapore, seems to differ in having much less white at base.

110. *Papilio helenus*.

*Papilio helenus*, Linnæus, Mus. Lud. Ulr. p. 185 (1764).

♂. Near Assam.

111. *Papilio ganesa*.

*Papilio ganesa*, Gray, Zool. Miscell. p. 73 (1842).

(Three specimens.) Near Assam.

112. *Papilio paris*.

*Papilio paris*, Linnæus, Mus. Lud. Ulr. p. 184 (1764).

♂. Near Assam.

113. *Papilio cacharensis*, sp. n.

Smaller and narrower in the wing than *P. Doubledayii*, to which it is most nearly allied; the white patch in the cell of secondaries much smaller, only occupying about two fifths instead of two thirds of the discoidal areole, the other white spots also smaller. Expanse of wings 99–108 millim.

One male. Near Assam.

In the Museum collection we have two females from Cachar. *P. Doubledayii* expands from 116 to 136 millim.

**Hesperiidæ.**114. *Astictopterus diocles*.

*Nisoniades diocles*, Moore, P. Z. S. 1865, p. 787.

Near Assam.

**Sphingidæ.**115. *Protoparce orientalis*.

*Protoparce orientalis*, Butler, Trans. Zool. Soc. vol. ix. p. 609, pl. xci. figs. 16, 17 (1876).

♂. Manipur.

**Agaristidæ.**116. *Eusemia bellatrix*.

*Eusemia bellatrix*, Westwood, Cab. Orient. Ent. pl. xxxiii. fig. 2.

Near Assam.

**Chalcosiidæ.**117. *Amesia aliris*.

*Gynautocera aliris*, Doubleday, Ann. & Mag. Nat. Hist. ser. 1, vol. xix. p. 74 (1847).

Manipur.

## CALLAMESIA, gen. nov.

Allied to *Amesia*, but the primaries of a more triangular (*Euplœa*-like) form; the first subcostal branch running into the costal vein instead of running freely to the margin, both first and second branches emitted much further from the end of the cell, third and fourth branches forming a much narrower fork to apex; upper radial nearly straight instead of curved; lower radial emitted from the posterior angle of the cell instead of from the third median branch; submedian and internal veins united beyond the middle by a transverse veinlet\*; secondaries much more oval than in *Amesia*, but with similar neuration. Antennæ pectinated in both sexes; palpi porrected; legs more slender than in *Amesia*; genitalia of males not covered by the great horny incised shield common to *Amesia*. Type *C. midama*.

118. *Callamesia midama*.

♂. *Epyrgis midama*, Herrich-Schäffer, Auss. Schmett. fig. 7.

♂. Near Assam.

119. *Erasmia pulchella*.

*Erasmia pulchella*, Hope, Trans. Linn. Soc. xviii. p. 446, pl. xxxi. fig. 5.

Near Assam.

## Nyctemeridæ?

120. *Pterothysanus laticilia*.

*Pterothysanus laticilia*, Walker, Cat. Lep. Het. ii. p. 401 (1854).

Near Assam.

Herr Buchecker thinks that this genus should be placed (with its near ally *Caloschemia*) next to *Epicopeia*, on account of its having no internal vein to the secondaries; it, however, differs from *Epicopeia* in having four branches to the median vein in all the wings, a radial vein being emitted from the inferior angle of the cell in each instance; this is also the case with *Deilemera*, *Pitasila*, *Tryptheromera*, *Leptosoma*, and other genera of Nyctemeridæ. Though it is impossible, without knowing the earlier stages of a genus like this, to come to any final decision as to its proper location, it appears to me that one character of venation should be of equal importance with another. In all probability the internal vein is merely aborted.

\* This very aberrant character, pointed out to me by Herr Buchecker, first satisfied me that two genera were confounded under *Amesia*.

121. *Pterothysanus atratus*, sp. n. (Pl. VIII. fig. 3.)

Primaries above smoky brown; a large spot near the base of interno-median area; a second larger spot within the end of the cell, two small spots beyond the cell; two spots, well separated, beyond the middle of the costal border; an oblique subapical  $\gamma$ -shaped marking, a spot at outer third of second median interspace, and a large excised patch crossed by the first and second median branches, all white; a marginal series of irregular angular pink spots: secondaries white; base, costal margin, an irregular angulated band, widest at inner margin, crossing the wing before the middle, and the external third (the inner edge of which is acutely incised and undulated) smoky brown; five rather small submarginal white spots; a marginal series of irregular angular pink spots. Body orange-ochreous, spotted with black; venter black, with two parallel series of small white spots. Expanse of wings 74 millim.

Near Assam.

Apart from differences of pattern this species is readily separable from *P. laticilia* by the pink marginal spots, in which respect it shows some relationship to *P. pictus*.

## Lasiocampidæ.

122. *Spalyria testacea*.

*Dreata testacea*, Walker, Cat. Lep. Het. iv. p. 906. n. 9 (1855).

*Eupterote testacea*, Butler, Ill. Typ. Lep. Het. v. p. 67, pl. xcvi. fig. 1 (1881).

Near Assam.

123. *Eupterote lucia*, sp. n. (Pl. VIII. fig. 4.)

♀. Nearest to *E. amæna* from Java; of about the size of the largest specimens of that species; of a more brilliant chrome-yellow colour; all the wings crossed by three central or nearly central purplish-brown lines, dentate-sinuate on the primaries and zigzag on the secondaries, the third line partly bounded externally by a nearly straight band of the same colour, followed at a short distance by a series of dots on the veins, which towards costa of primaries are united by an undulated brown line, forming the inner edge of three imperfect confluent rings, the lower two of which enclose brown spots; the outer edge of the rings commences as an ill-defined sinuated submarginal line; costa of primaries irrorated with brown towards apex; markings below less perfect, but widening towards costa of primaries, chocolate-coloured. Expanse of wings 95 millim.

Near Assam.



Readily distinguished from all females of *E. amœna* by the entire absence of the purplish-rufous undulated bands on the basal area, of the black spots across the disk, and of the marginal suffusion.

**Euschemidæ.**

124. *Euschema excubitor*.

*Euschema excubitor*, Moore, P. Z. S. 1878, p. 846.

Near Assam.

125. *Euschema militaris*.

*Phalœna Attacus militaris*, Linnæus, Syst. Nat. ii. p. 811. n. 12.

Near Assam.

**Phyllodidæ.**

126. *Lygniodes hypoleuca*.

*Lygniodes hypoleuca*, Guénée, Noct. iii. p. 125. n. 1500.

Near Assam.

**Hypopyridæ.**

127. *Spirama retorta*.

*Phalœna-Noctua retorta*, Cramer, Pap. Exot. ii. p. 29, pl. cxvi. F (1779).

♀. Near Assam.

Of the moths in this collection only one specimen of each species was captured.

EXPLANATION OF PLATE VIII.

*Fig. 1. Prothœ regalis.*

*Fig. 2. Terias heliophila.*

*Fig. 3. Pterothysanus atratus.*

*Fig. 4. Eupterote lucia.*

XXXII.—*Descriptions of Sponges from the Neighbourhood of Fort Phillip Heads, South Australia, continued.* By H. J. CARTER, F.R.S. &c.

[Continued from p. 294.]

Family 2. **Axinellida.**

Group 6. **MULTIFORMIA.**

We now come to the second family of the ECHINONEMA, viz. the Axinellida, whose diagnosis, as above extended, would stand thus:—